

Audit



Report

OFFICE OF THE INSPECTOR GENERAL

IDAHO TRAINING RANGE JUSTIFICATION

Report No. 95-274

June 30, 1995

20000107 086

Department of Defense

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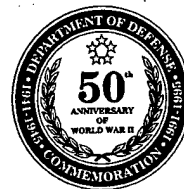
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Acronyms

AAA	Anti-Aircraft Artillery
ACC	Air Combat Command
AFB	Air Force Base
AWACS	Airborne Warning and Control System
GAO	General Accounting Office
ITR	Idaho Training Range
MOA	Military Operating Area
OSD	Office of the Secretary of Defense
SAM	Surface-to-Air Missile



**INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
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ARLINGTON, VIRGINIA 22202-2884**



June 30, 1995

**MEMORANDUM FOR UNDER SECRETARY OF DEFENSE (COMPTROLLER)
ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)
DIRECTOR FOR TEST, SYSTEMS ENGINEERING AND
EVALUATION**

**SUBJECT: Audit Report on the Idaho Training Range Justification
(Report No. 95-274)**

We are providing this audit report for review and comments. The report addresses our review of the Air Force's Idaho Training Range proposal. This audit resulted from an overall review of major ranges that the Deputy Director, Test Facility Resources, Office for Test, Systems Engineering and Evaluation (formerly the Director, Test and Evaluation), requested. We considered management comments on the draft of this report in preparing the final report.

DoD Directive 7650.3 requires that all recommendations be promptly resolved. We revised the recommendations addressed to the Under Secretary of Defense (Comptroller). Therefore, the Under Secretary of Defense (Comptroller) and the Air Force Deputy Chief of Staff, Plans and Operations, are requested to provide final comments on the revised recommendations by August 30, 1995.

The courtesies extended to the audit staff are appreciated. If you have questions on this audit, please contact Mr. Raymond Spencer, Program Director, at (703) 604-9071 (DSN 664-9071) or Mr. Roger Florence, Project Manager, at (703) 604-9067 (DSN 664-9067). Appendix A summarizes the potential benefits of this report and Appendix C lists its distribution. The audit team members are listed inside the back cover.

**Robert J. Lieberman
Assistant Inspector General
for Auditing**

Office of the Inspector General, DoD

Report No. 95-274
(Project No. 4AB-5019.01)

June 30, 1995

IDAHO TRAINING RANGE JUSTIFICATION

EXECUTIVE SUMMARY

Introduction. The State of Idaho, in coordination with the Air Force, has proposed the establishment of a new tactical training range in southwestern Idaho, designated the Idaho Training Range (ITR). The new range would supplement other ranges in the region and would provide training for elements of the 366th Wing at Mountain Home Air Force Base and the Idaho Air National Guard. The ITR would provide air-to-ground tactics training for pilots.

Objective. The audit objective was to review the justification for the establishment of the ITR. This audit resulted from a request for an audit of overall use of major ranges from the DoD Deputy Director, Test Facilities and Resources, Office of Test and Evaluation (now the Office for Test, Systems Engineering and Evaluation). The results of the overall audit were reported separately.

Audit Results. We found that the Air Force cost benefit analysis that supports the proposal was prematurely formulated because of the lack of an overall training plan for the 366th Wing. We did not evaluate the management control program because of the limited scope of the audit request and other ongoing audit work.

Summary of Recommendations. We recommended that the Under Secretary of Defense (Comptroller) withhold Air Force and Air National Guard funds related to establishing the ITR. We also recommended that the Air Force Deputy Chief of Staff, Plans and Operations, expedite completing the 366th Wing training plan, redo the cost benefit analysis, and provide those data to the Office of the Secretary of Defense for review before funds are released.

Management Comments. Management comments were received from the Deputy Director, Test, Systems Engineering, and Evaluation; the Assistant Deputy Comptroller (Program/Budget); and the Air Force Deputy Chief of Staff, Plans and Operation. The Deputy Director, Test, Systems Engineering, and Evaluation concurred with the report. The Assistant Deputy Comptroller stated that the Deputy Secretary of Defense had already determined that construction of the ITR was in the best interest of the Department and approved funding for ITR development. The Air Force Deputy Chief of Staff acknowledged that the ITR was not strictly necessary. He stated that the existing training resources enabled the 366th Wing to meet its training needs and to become combat ready. He agreed that the 366th Wing has not been flying to existing ranges as frequently as estimated in the cost benefit analysis and that the Air Force needed to reevaluate its calculations based on knowledge gained over the past 2 years. However, the Deputy Chief of Staff nonconcurred with terminating the ITR development. He stated that the ITR would significantly improve the training quality for the 366th Wing and the ITR would not duplicate existing training resources. The Deputy Chief of Staff stated that the draft audit report overlooked the unique opportunity Idaho offers for the use of a training complex that furthers combat training.

Audit Response. The Air Force comments were partially responsive, despite their lengthy critique of the alternative analysis in the draft audit report. The Air Force has not established the training requirement for the 366th Wing composite force or proved why existing training ranges cannot continue to provide composite force training.

A final decision on the benefit of investing in the ITR should not be made until the training concept and requirements are firm and a cost benefit analysis based explicitly on those requirements is completed. In response to the Assistant Deputy Comptroller (Program/Budget) comments, we determined that the Deputy Secretary of Defense made his decision before our draft report was issued. We are not calling for the FY 1996 budget to be amended; however, we believe that any exception to the general policy of downsizing DoD infrastructure needs to be based on well documented requirements and cost benefit analyses. Our revised recommendations would apply normal management controls and ensure sound justification before further release of funds. We request that the Under Secretary of Defense (Comptroller) and the Air Force Deputy Chief of Staff, Plans and Operations, provide comments to the final report by August 30, 1995.

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Part I - Introduction

Introduction

Background

The State of Idaho, in coordination with the Air Force, has proposed the establishment of a new tactical training range southwest of Mountain Home Air Force Base (AFB), Idaho, called the Idaho Training Range (ITR). The Air Force would use the range to train the 366th Wing and Idaho Air National Guard pilots in air-to-ground tactics. The ITR would provide composite force training that includes multiple types and numbers of aircraft training together. The Air Force was the "lead" regarding decisions on the development and use of the new range; the Bureau of Land Management, the Air Force, and the Idaho Air National Guard would participate in the development as cooperating agencies. The Air Force programmed \$11.0 million in Military Construction funds, \$9.4 million in Operations and Maintenance funds, and \$4.4 million in Other Procurement funds for the ITR. In addition, the Air National Guard has budgeted \$6.7 million in Military Construction funds to buy privately owned land for the ITR. Total DoD funding is estimated at \$31.5 million.

Objective

The audit's overall objective was to review the Air Force's justification for the ITR. We included the review of the ITR as part of a special request audit for the Deputy Director, Test Facilities and Resources.

Scope and Methodology

This economy and efficiency audit was made from March through October 1994 in accordance with audit standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD. We reviewed Air Force documentation and the Draft Environmental Impact Statement relating to the Air Force's proposal to establish the ITR. The documentation included the Mission Needs Statement for the ITR, the ITR Cost Benefit Analysis, the Air Combat Command Range Study - Comprehensive Range Plan and its Statement of Work, the Air Force White Paper on the Idaho Training Range, the Executive Summary Final Environmental Impact Statement/Draft Plan Amendment, and test range utilization reports. We reviewed documentation dated from March 1992 through September 1994. In addition, we interviewed officials from the Air Force Deputy Chief of Staff, Plan and Operations; Air Force Air Combat Command; Headquarters, Air National Guard; 366th Wing; Utah Test and Training Range; Tactical Fighter Weapons Center (Nellis); and Fallon Training Range Complex, Naval Air Station Fallon.

We used computer-processed data to identify the number of Air Force training flights to Saylor Creek Range and remote ranges (the Saylor Creek Range is a local training range used by the 366th Wing). In using the computer-processed data, we conducted a limited review of the data bases at the remote ranges and Mountain Home AFB and determined that the range utilization and flight data were not reliable. Due to the unreliability of the range utilization data, we used the flying reports data provided by Mountain Home AFB. The reliability of the Mountain Home AFB data was also questionable and may impact comparisons; however, the amount of the variation between the Air Force projections and historical data is too large to be attributed solely to data error. Organizations visited or contacted during the audit are listed in Appendix B.

Management Control Program

We did not assess the management control program or its implementation because of the limited scope of the audit request and because management controls over the requirements determination process for construction projects are being addressed in another audit.

Prior Audit

The General Accounting Office (GAO) issued report GAO/NSIAD 93-44 (OSD Case No. 9198), "Air Force Organization: More Assessment Needed Before Implementing Force Projection Composite Wings," on May 5, 1993. The GAO examined the basis for establishing three composite wings, whether these wings would achieve expected advantages, and whether these wings would create adverse effects. The report concluded that the Air Force conducted insufficient analysis before deciding to establish the composite wings. Specifically, the Air Force had not established clear criteria for the concept of the composite wings or for judging the validity of the concept. The composite wings had significant limitations as they must be augmented by aircraft from other bases to perform their peacetime and wartime taskings. Limited opportunities existed for these wings to train as large-scale composite forces and the available ranges at Mountain Home AFB and Pope AFB, North Carolina, were too small to support force-level training.

The report recommended that the Office of the Secretary of Defense (OSD) direct the Secretary of the Air Force to take no further steps to implement the composite wings until additional analysis had been conducted, that OSD formally commit capabilities not owned by the wings to the wings for routine training and deployment, that the Air Force reconsider its decision to relocate EF-111 aircraft from Mountain Home AFB, and that OSD assess other potential locations and basing structures for the Pope AFB air/land wing.

Introduction

The Assistant Secretary of Defense (Strategy and Requirements) (the Assistant Secretary) (formerly the Principal Deputy Under Secretary of Defense [Strategy and Resources]) responded to the GAO report and generally nonconcurred with the report's recommendations. The Assistant Secretary stated that to delay establishing the composite wings would serve no constructive purpose and would deprive the Air Force and the Congress of the opportunity to evaluate composite wing cost and expected improvement in military effectiveness. The Assistant Secretary also stated that formal commitment of resources was not necessary or required since the Air Force was committed to training and deploying required forces and that the Air Force Chief of Staff had determined that EF-111 aircraft were an essential adjunct to composite wings, as were heavy bombers. He stated that the principal reason for stationing the air/land composite wing at Pope AFB was to facilitate training and working relationships with the Army's rapid deployment force and Air Force personnel. The Assistant Secretary disagreed that the Mountain Home training range (Saylor Creek) was inadequate for composite force training and asserted that Saylor Creek can support day-to-day training performed by composite wings. He explained that large-scale composite force exercises would use large ranges like Utah Test and Training Range or Nellis Range. The Assistant Secretary added that large-scale training at a distant range provides an opportunity to incorporate tanker support to the mission training and would add realism to that type of training.

Part II - Finding and Recommendations

Idaho Training Range Justification

The Air Force's initial cost benefit analysis to justify the Idaho Training Range (ITR) is not valid. The Air Force's analysis was formulated without the benefit of first developing a composite wing training requirement plan. Therefore, the Air Force and the Idaho Air National Guard have programmed \$31.5 million for an as yet inadequately documented requirement.

Background

As a result of the FY 1991 base closure and realignment process, the Air Force established the 366th Wing (the 366th Wing) at Mountain Home Air Force Base (AFB), Idaho. The composite wing concept permanently collocates a variety of aircraft and capabilities under one commander. The 366th Wing consists of F-15C/D air-to-air fighters, F-15E air-to-ground fighters, F-16 C/D multipurpose fighters, B-1B bombers, E-3B/C Airborne Warning and Control System (AWACS) aircraft, and KC-135R refueling tankers. These aircraft are necessary for the 366th Wing's mission of deep air strike and neutralization of enemy forces.

The 366th Wing and the Idaho Air National Guard use the Saylor Creek Range, approximately 30 nautical miles from Mountain Home AFB, and the remote ranges of the Utah Test and Training Range; the Tactical Fighter Weapons Center (the Nellis Range) in Nevada; and the Fallon Training Range Complex in Nevada to conduct training. The Saylor Creek Range supports both air-to-ground and electronic combat training. Air Force officials stated that although Saylor Creek Range provides adequate pilot training, it is unsuitable for complex, composite force training.

In 1991, the Governor of Idaho made an unsolicited offer to the Air Force to expand training capabilities near Mountain Home AFB. The State of Idaho proposed to establish a set of six target areas in two separate tactical training ranges in southwestern Idaho: a North and South ITR would be used with the Saylor Creek Range. Under this offer, the State of Idaho and the Bureau of Land Management would exchange parcels of land and the Idaho Air National Guard would use DoD appropriated funds to purchase privately owned land necessary to complete the ITR complex. The Air Force and Idaho Air National Guard estimated that \$31.5 million was required for purchasing privately owned land, constructing roads and buildings, purchasing targets and range equipment, and operating and maintaining the ITR. At the time of our audit, the Air Force had expended \$4.5 million for the required ITR environmental studies.

Air Force Deputy Chief of Staff, Plans and Operations, was responsible for the development of policy on the acquisition, disposition, and use of air-to-ground

and ground-to-ground ranges in the United States. The Deputy Chief of Staff also manages the development of new ranges and the expansion of existing ranges.

Existing DoD Tactical Training Ranges

DoD operates and maintains 19 Major Range and Test Facility Bases (the major test ranges) that provide testing facilities and training support services to the Military Departments. Three of these ranges are used by the 366th Wing as discussed below.

Utah Range. The Utah Range is an Air Force-operated major test range that conducts aircraft testing, weapon systems testing, and training. The Utah Range has multiple threat systems that provide a realistic combat environment and several target complexes that provide near-real-time scoring information to aircrews. Additionally, the Utah Range instrumentation can track aircraft and monitor aircraft position and flight parameters.

The Utah Range airspace consists of more than 16,500 square miles and is divided into restricted areas where only military aircraft can fly and military operating areas (MOAs) where both military and civilian flights may occur. The Utah Range airspace allows multiple attack approaches, including low-altitude, necessary for composite force training. The Air Force air traffic control center at Hill AFB controls the Utah Range airspace.

The North Range is about 175 nautical miles from Mountain Home AFB and consists of almost 350,000 acres of land for exclusive DoD use. North Range contains several tactical training target areas: the Craners Complex, the Eagle Range, and the Helicopter Air-to-Ground Complex. The Craners Complex has 29 target areas that simulate anti-aircraft artillery (AAA) sites, aircraft, truck convoys, ground forces, a rail yard, and a Television Ordnance Scoring System that provides scoring information for weapons dropped at targets. The Eagle Range has 10 bomb and target zones and plans a Television Ordnance Scoring System. The Helicopter Air-to-Ground Complex consists of targets that simulate AAA sites, artillery sites, truck convoys, a motor pool, and tanks. In addition, the Helicopter Air-to-Ground Complex has several targets for aircraft laser-guided weapons.

The South Range is 200 nautical miles from Mountain Home AFB and consists of nearly 575,000 acres of DoD-owned land and has areas for conventional and tactical training called Kitty cat and Wildcat Ranges. The Kitty cat Range has 16 target areas that simulate a runway with aircraft, AAA sites, a bridge, truck convoys, ground forces, a motor pool, fuel storage sites, a rail yard, surface-to-air missile (SAM) sites, tunnels, and tanks. The Wildcat Range consists of targets that simulate a runway with aircraft, AAA sites, a bridge, communications facilities, ground forces, a motor pool, fuel storage sites, radars, a rail yard, SAM sites, a supply depot, tunnels, and tanks.

Idaho Training Range Proposal

The Utah Range officials have two proposals that would increase its capabilities to support tactical training at the North Range. The first proposal was to increase the MOA altitude to 18,000 feet and the second proposal was to establish another target area, the Crater Island Target Complex. Officials at the Utah Range stated that increasing the North Range MOA would provide aircrews with safer low- and medium-level navigation and air combat training. The Crater Island Target Complex proposal would develop a simulated refinery complex, SAM sites, tank columns, gun pits, tunnels, and ground-control-intercept sites. Utah Range officials estimated that the cost to establish the Crater Island Target Complex was about \$1.0 million. They also stated that its proposals to increase the North Range MOA altitude and to establish the Crater Island Target Complex would allow the North Range to be used exclusively for training, while the South Range would be used for both testing and training. The Air Force Air Combat Command and the Utah Range officials discussed the Crater Island Target Complex, but Air Combat Command officials declined to pursue the proposal due to a lack of funds.

Nellis Range. The Nellis Range is an Air Force-operated range that is 330 nautical miles from Mountain Home AFB. Its mission is to provide a combat-like environment for aircrew training including large composite force exercises, tactics development and evaluation, and operational testing and evaluation. The Nellis Range has 12,000 square miles of airspace and includes more than 3.0 million acres of land divided into a North and a South Range. The Nellis Range airspace is controlled by its traffic control facility.

The Nellis North Range provides aircrew tactical training capabilities and has targets that simulate SAM sites, AAA sites, airfields, trucks, convoys, missile storage sites, and artillery companies. The North Range also has threat emitter systems and radars to send intercept signals to approaching attack aircraft.

The Nellis South Range consists of weapon ranges used for testing, tactics development, and training. Tactical and conventional training capabilities include target bombing circles, strafe areas, and a variety of tactical targets (such as tanks, trucks, and bridges). Instrumentation is also available at the Nellis South Range that can track, score, and review air-to-air combat training scenarios.

Fallon Range. The Fallon Range, approximately 240 nautical miles from Mountain Home AFB, is a training complex consisting of four ranges covering 97,000 acres and about 10,000 square miles of airspace. The Fallon Range is used for composite training and has the capability for training with conventional and special weapons. An electronic warfare range also exists that contains both fixed and mobile radars that can emit threat signals.

In summary, the Utah, Nellis, and Fallon ranges are suitable for composite force training and the ranges have the required airspace and ground areas. During our audit, 366th Wing officials stated that all training requirements were being met with the Saylor Creek Range and the Utah, Nellis, and Fallon ranges. Further, the Idaho Air National Guard evaluated the ITR proposal and concluded that all of its training requirements were being met without the ITR.

Tactical Training Site Evaluation

In evaluating the ITR proposal, the Air Force evaluated alternate training sites to determine their suitability, capacity, and quality to accommodate composite force training. For suitability, the range and airspace had to support composite force training; for capacity, the range had to accommodate multiple aircraft consisting of a composite force; for quality, the range had to provide a realistic environment, be flexible, and be able to meet training requirements. The Air Force also established criteria that, for the 366th Wing, the training site should be no more than 150 nautical miles from Mountain Home AFB. The Air Force established the 150 nautical miles distance because it is the maximum practical distance that aircrews can travel for routine, day-to-day training without aerial refueling. As a result, the Air Force eliminated the Utah Range from further consideration because it was 175 nautical miles from Mountain Home AFB. However, our review of the 366th Wing flight records for October 1992 through August 1994 indicated that approximately 80 percent of all flights to the Utah Range were not refueled. Therefore, the Air Force's assertion that flights from Mountain Home AFB to the Utah Range, which is greater than 150 nautical miles away, would require refueling was questionable.

The Air Force also eliminated the Utah Range because it believed that testing and training would cause scheduling conflicts. During the audit, Utah Range officials stated that they anticipated a reduction in testing as a result of DoD developing fewer weapons systems. Also, the officials believed that further reductions in testing will result in more available range capacity for training. Officials at neither the Utah Range nor the 366th Wing could provide any documentation that showed training missions were rescheduled or terminated due to being preempted by testing. However, the DoD subsequently recommended transfer of Utah Range management to the Air Combat Command in its 1995 base realignment and closure package.

ITR Cost Benefit Analysis

The Air Force developed a cost benefit analysis (the analysis) that identified a \$20.6 million benefit to justify the establishment of the ITR. The analysis was not performed in the normal sequence of events. In the normal facility requirement determination process, the Air Force would first develop a composite wing training plan as the justification for considering the development of a new training range. Then, an analysis would have evaluated different alternatives to satisfy the training requirement. In this case, the decision was made to build the new ITR. Then, when congressional staffers questioned the cost benefit of the ITR, the Air Force hastily prepared the analysis. At the completion of our audit, an approved composite wing training plan still did not exist for the 366th Wing. Until this training plan is developed, a legitimate analysis cannot be accomplished.

Idaho Training Range Proposal

In its initial analysis, the Air Force examined two options. The first option with "no ITR" assumed the ITR would not be established. As a result, the 366th Wing would continue to conduct training at the local Saylor Creek Range and remote ranges. The second option "with the ITR" assumed the ITR would be established. As a result, the 366th Wing would train at the ITR, Saylor Creek Range, and significantly reduce training at remote ranges. The remote ranges would continue to be used to provide target variety for aircrews.

Under the "no ITR" option, the Analysis projected the 366th Wing would conduct 3,481 flights (sorties) yearly to remote ranges. Under the "with the ITR" option, the Air Force projected the 366th Wing would conduct 968 flights to remote ranges. The Air Force estimated that the reduced number of flights to remote ranges would decrease training hours lost in transiting and result in a yearly cost benefit of approximately \$20.6 million. The additional time and money would be used for more local aircrew training. We examined the analysis and determined that many of its assumptions are, at best, premature in the absence of a training plan. The wide variances between the data for previous 366th Wing training and projected future training may be reasonable, but they are currently inexplicable and their existence illustrates the need to redo the calculations related to requirements and alternatives.

Flight Projections to Remote Ranges. The Air Force analysis projected that 25 percent of the training flights would be flown to remote ranges. Our analysis of actual training flights to remote ranges, for FYs 1993 and 1994, showed that these training flights were only 8 percent of all training flights.

Flight Durations. Estimated flight durations to remote ranges in the analysis were inaccurate. The analysis used flight durations of 2.3 hours for the F-15C/D and F-16, and 1.8 hours for the F-15E. We examined the 366th Wing flight records to identify actual flying duration to remote ranges. We compared the actual flight durations to the estimates in the analysis and identified that five of six average flight profile durations in the analysis were overstated by about 30 minutes. We could not validate the estimated flight durations to the Nellis Range due the lack of records at the 366th Wing and at the Nellis Range. The flight duration overstatements resulted in an inaccurate flight cost to remote ranges because erroneous average flight duration information was applied to the flight hour cost.

Training Requirements

We examined the pilot training requirements that Air Force regulations established for the 366th Wing. The requirements for the 366th Wing are based on the number of authorized pilots, a rated pilot indicator (category), and pilot experience. Air Force pilots are expected to satisfy training requirements to maintain a "combat ready" status. Our analysis of required training flights for FY 1995 found the Air Force's estimate to be overstated by about 19 percent.

Training Quality

During our discussions at the Office of the Air Force Deputy Chief of Staff, Plans and Operations; the Air Force Air Combat Command (ACC); and the 366th Wing, we were informed that the primary consideration for establishing the ITR was its ability to enhance training quality. According to the ITR Draft Environmental Impact Statement, the measures used to assess training quality were the ability to:

- o provide a variety of target simulations including an airfield, industrial complex, railyard, bridges, SAMs, AAA, communication center, and fuel storage facilities;
- o use all air-to-surface weapons available to the composite force;
- o provide appropriate airspace to accommodate support aircraft such as AWACS, refueling tankers, and stand-off electronic combat aircraft during composite force training;
- o provide the ability for daytime and nighttime training;
- o provide mobile electronic emitters to replicate a battlefield situation;
- o provide targets that realistically replicate visual, radar, and infrared signals;
- o simulate missile defensive firings on attacking aircraft;
- o change target arrangements to deviate training situations; and
- o attack targets from multiple directions and aircraft altitudes.

Our review showed that the capabilities of the Utah Range satisfy the currently described training quality attributes applicable to 366th Wing training. As stated previously, the Utah Range's North Range contains trucks and other vehicles in convoy formations, SAM and AAA sites, a simulated factory, an airstrip, and targets designed for laser-guided weapons. The Utah Range has extensive airspace that can accommodate AWACS and other 366th Wing support aircraft, has the ability to conduct both daytime and nighttime training, and has targets that can be attacked from multiple directions and altitudes. We recognize that the North Range does not contain threat emitters, which is one quality attribute the Air Force cited for composite force training. However, if required, mobile threat emitters in its South Range could be transferred to the North Range. Additionally, the North Range's training quality attributes would be further enhanced if the Crater Island Target Complex, at an estimated \$1.0 million, were established.

Air Force ACC officials acknowledged that establishing the Crater Island Target Complex, in conjunction with other capabilities of the Utah Range's North Range, was a viable alternative to establishing the ITR.

Other Issues

Environmental and native American concerns also may impact the establishment of the ITR. As a result of environmental concerns, the Air Force proposed that no bombs would be dropped in the Northern ITR and that only temporary, movable targets would be used in that area. The native Americans in the Idaho area had previously taken legal action to oppose the establishment of the 366th Wing at Mountain Home AFB, and these cases are still pending. However, the Air Force has taken actions to reduce the impact of the ITR on the reservation.

Conclusion

Establishing the ITR would be an exception to the overall DoD attempt to downsize infrastructure. Such an exception may be warranted, but should be approved only after particularly close consideration of validated data on the requirement and the alternative ways of meeting that requirement. Until a composite wing training plan and a corresponding analysis have been prepared and approved, no further funds should be expended on the ITR.

Recommendations, Management Comments, and Audit Response

1. We recommend that the Under Secretary of Defense (Comptroller):

a. Withhold from the Air Force the funding associated with the proposed Idaho Training Range until resolution has occurred on Recommendation 2.

b. Withhold from the Air National Guard funding for the purchase of privately owned land related to establishing the Idaho Training Range until resolution has occurred on Recommendation 2.

Management Comments. The Assistant Deputy Comptroller (Program/Budget) stated that the Deputy Secretary of Defense had determined that the ITR is in the best interest of the Department and, after considering the audit report, decided to include funds for the ITR construction. Therefore, he nonconcurred with the draft recommendation to delete the ITR funding. The complete text of the management comments is in Part IV.

Audit Response. Management comments were nonresponsive. We determined that the Deputy Secretary of Defense decision to include funding for the ITR in the DoD budget was made before our December 1, 1994, draft report was issued. After receipt of the Assistant Deputy Comptroller (Program/Budget)

comments, we reviewed documentation submitted to the Deputy Secretary of Defense to identify what information was made available to him in making his decision. Information provided to him was only a comment that the IG, DoD, had completed an audit on the ITR and that the IG, DoD, believed that the ITR should be cancelled because it provided no cost benefit. We found no indication that the Deputy Secretary of Defense was made aware of all issues raised during the audit, especially the incompleteness of the requirements determination process.

The draft report recommended the deletion from the DoD budget of Air Force funding for the ITR and the Air National Guard funding for purchase of privately owned land related to the ITR. Since the DoD budget has been submitted to Congress for consideration, we revised the recommendations to the Under Secretary of Defense (Comptroller). We request that the Under Secretary respond to the revised recommendations.

2. We recommend that the Air Force Deputy Chief of Staff, Plans and Operations:

a: Expedite completion of an approved composite force training plan for the 366th Wing.

b. Factor the requirements approved in the training plan into a new cost benefit analysis.

c. Provide the updated requirements and cost benefit data to the Under Secretary of Defense (Comptroller) and the Inspector General, DoD, for review, if release of further funding for the Idaho Training Range is requested.

Management Comments. The Air Force Deputy Chief of Staff, Plans and Operations, acknowledged that the ITR was not strictly necessary for composite force training. He stated that the 366th Wing has met training needs using the existing Saylor Creek Range; using the contiguous airspace in Idaho, Oregon, and Nevada; and using the tactical ranges in Utah and Nevada. The Deputy Chief of Staff stated that using the existing assets, the 366th Wing has trained adequately and has become combat ready. However, the Deputy Chief of Staff nonconcurred with terminating the ITR development. He stated that the draft report did not address a key point: the ITR would significantly improve the training quality for the 366th Wing. He also disagreed that the ITR would duplicate other assets. The Deputy Chief of Staff stated that the draft report overlooked the unique opportunity offered by the State of Idaho for a training complex that furthers combat training.

The Deputy Chief of Staff provided detailed comments concerning training quality and the cost benefit analysis. For training quality, he stated that the ITR would provide composite force training and significantly improve readiness for the same resource expenditure. He stated that frequent, intense, and flexible schedule training in a realistic simulated combat environment are the ingredients of improved readiness and that the 366th Wing would continue to use valuable flight training hours commuting to remote ranges.

Idaho Training Range Proposal

The Deputy Chief of Staff explained that the Air Force cost benefit analysis was prepared in response to a congressional inquiry and was an attempt to calculate the monetary value afforded by a nearby tactical range. He stated that the Cost Benefit Analysis was intended to illustrate that local training has a cost advantage over more remote training ranges. The Deputy Chief of Staff asserted that the 366th Wing has not been flying to existing ranges as frequently as expected and the Air Force will reevaluate its calculations based upon knowledge gained over the past 2 years. He disputed the validity of the alternative calculations made by the auditors and shown in the draft report. Those calculations were based on past 366th Wing flight experience, which he asserted was the wrong baseline. A partial text of the comments is in Part IV.

Audit Response. Management comments were partially responsive. We do not question that a training range near Mountain Home AFB would make training more convenient. However, the Air Force has not yet developed a training program for composite force training and the creation of the range would duplicate existing training resources. Until a 366th Wing composite force training program is developed, the Air Force does not know the composition, frequency, and intensity of the required training. Lacking that information, no credible cost benefit analysis is feasible. For that reason, we deleted much of the detailed alternative analysis information from this final report. The key point is that the normal progression for facilities requirements determination needs to be followed. On that point, the Air Force and we agree. The draft recommendation has been revised and expanded. We request Air Force comments on those changes.

The Air Force provided lengthy comments to the issues discussed in the draft report. Given the revisions made in this final report, we do not believe it would be useful to address those in detail.

Part III - Additional Information

Appendix A. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit
1.a.	Economy and Efficiency. Defers further expenditure for new training range until necessary justification is provided.	Funds put to better use. Up to \$11.0 million of FYs 1996 through 1997 Military Construction Funds, \$4.4 million of FYs 1996 through 1999 Other Procurement Funds, \$9.4 million of FYs 1996 through 2001 Operations and Maintenance Funds, depending on final decision.
1.b.	Economy and Efficiency. Same as above.	Funds put to better use. Up to \$6.7 million of FY 1994 Air National Guard Military Construction Funds, depending on final decision.*
2.a,b,c.	Economy and Efficiency and Management Control. Ensures that the proposed investment is properly analyzed and justified in terms of validated requirements and cost benefit data.	Nonmonetary.

* This amount would be reduced by approximately \$1.0 million associated with the creation of the Crater Island Target Complex at the Utah Test and Training Range. No potential monetary benefits will be reported by the IG, DoD, under this report number to the Congress, because the decision on the project would be deferred, not made at this point. Lacking requirements data, it is premature to recommend either cancelling or proceeding with the project.

Appendix B. Organizations Visited or Contacted

Office of the Secretary of Defense

Deputy Director, Test Facilities and Resources, Washington, DC

Department of the Navy

Fallon Range Training Complex, Fallon, NV

Department of the Air Force

Secretary of the Air Force, Washington, DC
Air Combat Command, Langley Air Force Base, VA
Air Force National Guard, Andrews Air Force Base, MD
366th Wing, Mountain Home Air Force Base, ID
Utah Test and Training Range, Ogden, UT
Tactical Fighter Weapons Center, Nellis Air Force Base, NV

Appendix C. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Strategy and Requirements)
Assistant to the Secretary of Defense (Economic Security)
Assistant to the Secretary of Defense (Public Affairs)
Director for Test, Systems Engineering, and Evaluation
Deputy Director, Test Facilities and Resources

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Acquisition)
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Deputy Chief of Staff, Plans and Operations
Air Combat Command
Air National Guard
366th Wing
Utah Test and Training Range
Auditor General, Department of the Air Force

Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, National Security Agency
Inspector General, National Security Agency

Non-Defense Federal Organizations

Office of Management and Budget
Technical Information Center, National Security and International Affairs Division,
General Accounting Office

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on National Security, Committee on Appropriations
House Committee on Government Reform and Oversight
House Subcommittee on National Security, International Affairs, and Criminal
Justice, Committee on Government Reform and Oversight
House Committee on National Security

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Part IV - Management Comments

Office of the Under Secretary of Defense for Acquisition and Technology Comments



OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000



JAN 19 1995

MEMORANDUM FOR DIRECTOR, ACQUISITION MANAGEMENT DIRECTORATE,
OFFICE OF THE INSPECTOR GENERAL

SUBJECT: Review of Draft Audit Report on the Idaho Training
Range Proposal (Project No.4AB-5019.01)

Our office has reviewed the Draft Audit Report on the Idaho
Training Range Proposal and provides the following changes:

Objective (both in Executive Summary and in Part I -
Introduction) second sentence should read, "This audit derived
from investigations performed as part of Audit 95-061, Expanded
Use of the Major Range and Test Facility Base; an audit requested
by the Deputy Director for Test Facilities and Resources, Office
of Director, Test and Evaluation (now the Office of Director,
Test, Systems Engineering, and Evaluation (DTSEE))."

DTSEE recognizes the need to reduce unwarranted duplication
of facilities and to maximize the utilization of existing
facilities and capabilities. We wholeheartedly support the
DOD/IG efforts to control unwarranted duplication. If we can be
of further assistance please do not hesitate to call.

J. V. Bolino

John V. Bolino
Deputy Director
Test, Systems Engineering,
and Evaluation
Test Facilities and Resources

Office of the Under Secretary of Defense (Comptroller) Comments



COMPTROLLER

(Program/Budget)

OFFICE OF THE UNDER SECRETARY OF DEFENSE
1100 DEFENSE PENTAGON
WASHINGTON, DC 20301-1100



JAN 31 1995

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING, DOD IG

SUBJECT: Draft Audit Report on the Idaho Training Range
Proposal (Project No. 4AB-5019.01)

This responds to your request for comments concerning your findings and recommendations included in the subject draft report.

The Deputy Secretary of Defense has determined that construction of the Idaho Training Range is in the best interests of the Department and, after considering the findings in the draft audit, decided to include funds in the FY 1996 and FY 1997 budget for construction and operation of the range.

Therefore, we cannot support your recommendation to delete funding for the range from the Department of Defense budget.

BRUCE A. DAUER
ASSISTANT DEPUTY COMPTROLLER
(PROGRAM/BUDGET)

Department of the Air Force Comments



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

FEB 1 1995

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING
OFFICE OF THE INSPECTOR GENERAL
DEPARTMENT OF DEFENSE

SUBJECT: Idaho Training Range Proposal, December 1, 1994, Project No. 4AB-5019.01

This is in reply to your memorandum requesting the Assistant Secretary of the Air Force (Financial Management and Comptroller) to provide Air Force comments on subject report.

Enclosed is a copy of the Air Force's specific responses to the draft IG report. It is important that the issues and errors identified in the Air Force response be resolved in the final audit report.

The draft report is largely devoted to establishing what the Air Force has long acknowledged — the State's proposed Idaho Training Range is not a necessity for composite wing training in Idaho. The composite wing was established at Mountain Home AFB in 1992 and has achieved a mission ready status. The wing has met its basic training needs using the existing Saylor Creek Range, the airspace of contiguous Military Operating Areas (MOAs) in Idaho, Oregon, and Nevada, and tactical ranges in Utah and Nevada. By making use of these various existing assets, the wing has trained adequately and become combat ready. It has done so in the absence of the State's proposed range.

What the draft report does not address is the Air Force's key point: the proposed range would significantly improve the quality of the training of Mountain Home's composite wing, one of the nation's premier combat units. The draft report concludes that the Idaho Training Range would be a duplication of assets located elsewhere and states that "DoD budget draw-downs do not permit the expenditure of resources to satisfy a need that existing available resources can meet." The Air Force does not agree that the Idaho Training Range would duplicate other assets. In addition, the audit's reasoning overlooks the unique opportunity being presented to the Air Force by a supportive State for the use of a training complex which would significantly further excellence in combat training.

Atch
Proposed Air Force Response


MICHAEL J. MCCARTHY, Brig Gen, USAF
Director of Operations
DCS, Plans and Operations

RESPONSE OVERVIEW

The principle findings of the audit report are that the proposed Idaho Training Range (ITR) is an unwarranted duplication of existing DoD tactical training ranges; that an Air Force cost benefit analysis used to justify the ITR is not valid; and that as a result, the Air Force and Idaho Air National Guard will unnecessarily spend \$35.4 million. The audit report recommends that the Air Force Deputy Chief of Staff, Plans and Operations, cancel the effort to establish the ITR and continue using existing ranges.

The Air Force does not concur that the ITR is an unwarranted duplication of existing ranges. Currently, the existing Saylor Creek Range is being used for individual aircrew skill training, and the more distant ranges — the Utah Test and Training Range (UTTR), and the Nellis and Fallon Ranges — are being used for composite force training. While this provides a mission ready composite wing, the effort and resources expended are higher for the level of readiness achieved. A local range capable of supporting composite force training would achieve significantly improved readiness for the same resource expenditure. A local range capable of supporting composite force training would increase the frequency and intensity of composite force training and provide a flexible environment that could adapt to the daily scheduling demands of the composite wing. Frequent, intense, and flexibly scheduled training, in a realistic simulated combat environment, are the ingredients of improved readiness. The status quo would continue to use valuable flight training hours commuting to distant ranges. General McPeak, the former Air Force Chief of Staff, summarized the Air Force position as follows: "To meet our composite training needs today, the Mountain Home wing spends many hundreds of flying hours and millions of dollars getting to distant ranges. We believe this time and money would be better spent on combat training, not cross-country flying." General Shalikashvili has also endorsed the range, saying "[t]he Composite Wing concept is certainly enhanced if training missions can be briefed, flown and debriefed on a local range..."

The Air Force also does not concur with the audit's cost benefit conclusions. In response to a Congressional inquiry, an Air Force analysis attempted to calculate a monetary value for the training afforded by a nearby tactical range. The reason for the ITR has always been to improve the quality of training available to Mountain Home AFB and the Idaho National Guard units. Based on a fixed number of flying hours, the composite wing can accomplish higher quality training on a local range than it can commuting to distant ranges. The cost benefit analysis was intended only to illustrate the point that conducting combat training within the local area has a cost advantage over conducting the same combat training at more remote range facilities. To date, the composite wing has not been flying to existing ranges as frequently as had been expected, leading the auditors to believe that cost value of a nearby range would be less than previously stated. The Air Force's various flying projections have not yet been met, and the Air Force will re-evaluate its calculations based upon the knowledge gained over the past two years. The audit report, however, mistakenly attempted to overcome the deficiencies it had discovered by preparing its own calculations and in that process has made its own errors. As a result, the audit report inaccurately concludes that the ITR has no cost benefit. Indeed, the audit report concludes that the Air Force would spend more funds traveling to distant ranges were the ITR to be constructed than the Air Force would spend in such travel without it. This is illogical. The Air Force recommends that the analyses be computed after the Air Force and the auditors have met and agreed upon a valid, mutually accepted approach for making these calculations.

Department of the Air Force Comments

The Air Force does not concur that implementation of the audit's recommendations would result in monetary benefits of \$35.4 million. The Air Force expects the six-year cost of the ITR (construction plus yearly O&M) to not exceed \$31.5 million.

Finally, the Air Force does not concur with the recommendation to cancel the effort to establish the ITR and continue using existing ranges. The Air Force believes that the ITR would make a significant, cost effective contribution to the training of the composite wing. This enhancement to training has been, and should continue to be, strongly supported within DoD.

PART I - INTRODUCTION

Background (p. 2)

First sentence: "The Air Force has proposed the establishment of a new tactical training range southwest of Mountain Home Air Force Base (AFB), Idaho, called the Idaho Training Range (ITR)."

-Air Force Response- Nonconcur. The statement is incomplete. The proposed range is a State of Idaho proposal for a State of Idaho-owned range on State lands to be acquired in a land exchange with the Bureau of Land Management (BLM), Department of Interior. The proposal for a new tactical training range was made by the Governor of Idaho in 1990. The details of the State's proposal have been developed in coordination with the Air Force, and the Air Force would invest significant funds in the range, but the State's preeminent role should not be omitted. The Air Force strongly supported the State's proposal and made it the Air Force's proposed action in the Draft Environmental Impact Statement (EIS) published November 1993.

Second and third sentences: "The Air Force would use the range to train the 366th Wing and Idaho Air National Guard pilots in air-to-air and air-to-ground tactics."

-Air Force Response- Nonconcur. The range would provide the ground portion of composite force training. Air-to-air training is already being conducted within the existing MOAs in Idaho, Oregon, and Nevada.

Fourth sentence: "The Air Force was the 'lead' regarding decisions on the development and use of the new range; the Bureau of Land Management, the Idaho Air National Guard, and the State of Idaho would participate in the development as cooperating agencies."

-Air Force Response- Nonconcur. The State has been the lead regarding decisions on the development and use of its range. The Air Force and BLM have participated in its development. The Air Force has been the lead agency responsible for preparing the EIS.

Fifth, sixth, and seventh sentences: "The Air Force programmed \$14.9 million in Military Construction funds, \$9.4 million in Operations and Maintenance funds, and \$4.4 million in Other Procurement funds for the ITR. In addition, the Air National Guard has budgeted \$6.7 million in Military Construction funds to buy privately owned land for the ITR. Total DoD funding is estimated at \$35.4 million."

-Air Force Response- Nonconcur. The Air Force expects the six year cost of the ITR (construction plus yearly O&M) to not exceed \$31.5 million. This is because the Air Force has

Department of the Air Force Comments

reduced estimated construction costs by \$3.9 million. The total breakout of the funding for FY 96 - FY 01 is as follows: Equipment: \$4.4M, Military Construction: \$11.0, Operations and Maintenance: \$4.2M, Personnel: \$5.2M = \$24.8M + \$6.7 Air National Guard = Total cost \$31.5M. Also, the \$6.7 million appropriated to the ANG for the purchase of private lands and grazing rights was based upon a preliminary Corps of Engineers estimate involving many more ranches and acres than actually required. The actual cost of land acquisition and grazing rights is expected to be much less than the funds appropriated.

Prior Audit (pp. 3-4)

Second para, fifth sentence: "The Assistant Secretary disagreed that the Mountain Home training range (Saylor Creek) was inadequate for composite force training and that Saylor Creek can support day-to-day training performed by composite wings."

-Air Force Response- Nonconcur. The DoD response was somewhat more limited. It said that Saylor Creek Range could support "much of" the day-to-day training performed by composite wings.

PART II - FINDING AND RECOMMENDATIONS

Idaho Training Range Proposal (p. 6)

First sentence: "The Air Force's proposed Idaho Training Range (ITR) is an unwarranted duplication of existing DoD tactical training ranges."

-Air Force Response- Nonconcur. The ITR training environment would provide unique training opportunities not afforded at Nellis, UTTR, and Fallon. ITR would provide a European scenario in addition to the desert scenarios which exist at Nellis, UTTR, and Fallon. Indeed, ITR would provide targets and threat arrays that resemble the five areas of possible future conflict throughout the world. In comparison to Nellis, UTTR, and Fallon, ITR would provide a less restrictive work area for training missions. ITR would also provide daily access to a tactical range and "first look" targets and threat arrays with a 360 degree attack axis.

The audit report focused on aircrews merely performing certain minimum training requirements to achieve and maintain a mission ready status, rather than examining the improved quality and quantity of training which the ITR would make available. The report does not address the efficiency of enhanced local training or the fact that as the composite wing matures, concepts of effective training continue to evolve. The justification for the ITR has always been to improve the quality of local training available to Mountain Home AFB and the Idaho ANG. The Air Force's cost benefit analysis was intended only to illustrate the point that efficient training within

the local area has a cost advantage over training conducted at more remote range facilities. The ITR offers advantages to local training which cannot be effectively duplicated using other ranges in the region.

Second sentence: "Also, the Air Force Cost Benefit Analysis to justify the ITR is not valid."

-Air Force Response- Nonconcur. The cost benefit analysis was not prepared to "justify" the range but was prepared in response to a specific question on cost benefit from HASC and SASC staffers. The justification for the range includes issues beyond just cost, as discussed in the other Air Force responses. The Air Force concurs that the projections used in the cost benefit analysis have not been met and will re-evaluate them.

Third sentence: "We attributed these conditions to the State of Idaho's efforts to influence the FY 1995 base closure selection process and an eagerness by both Air Force and Idaho State officials to establish the training range."

-Air Force Response- Nonconcur. The auditors' opinion as to the State's motivation is their own, but the Governor of Idaho made his proposal in 1990, long before an FY 1995 base closure process. The Air Force's interest in the range neither makes the range unwarranted nor caused the problems with the cost benefit analysis. The flying projections were taken from the draft EIS that had been published by the Air Force.

Fourth sentence: "Therefore, the Air Force and the Idaho Air National Guard will unnecessarily spend \$35.4 million."

-Air Force Response- Nonconcur. See previous response on cost estimate.

Background (pp. 6-7)

Second para, third sentence: "Air Force officials stated that although Saylor Creek Range provides adequate pilot training, it is unsuitable for complex, composite force training."

-Air Force Response- Concur. Saylor Creek Range is unsuitable for complex, composite force training. However, for clarification, Saylor Creek Range only provides adequate basic combat training.

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Third para, first sentence: "The Governor of Idaho, concerned about the possibility that Mountain Home AFB could be included in FY 1995 base closure recommendations made an unsolicited offer to the Air Force to expand training capabilities near Mountain Home AFB."

-Air Force Response- Nonconcur. The Governor's offer was made in 1990 as a solution to the difficulties experienced during the Air Force's earlier attempt to expand Saylor Creek for the missions expected at that time.

Fourth para, first sentence: "In pursuit of the Governor's offer, the Air Force proposed to establish a set of six target areas in two separate tactical training ranges in southwestern Idaho: a North and South ITR would be used with the Saylor Creek range."

-Air Force Response- Nonconcur. The division of the Governor's original proposal into two separate tactical training ranges was made in response to environmental concerns by the State, not by the Air Force.

Fourth para, third sentence: "The Air Force and Idaho Air National Guard estimated that \$35.4 million was required for purchasing privately owned land, constructing roads and buildings, purchasing targets and range equipment, and for operation and maintenance of the ITR."

-Air Force Response- Nonconcur. See previous response on cost estimate.

Existing DoD Tactical Training Ranges (p. 7)

First para, second sentence: "Two of the major test ranges are near Mountain Home AFB: the Utah Test and Training Range (the Utah Range) and the Tactical Fighter Weapons Center (the Nellis Range).

-Air Force Response- Nonconcur. "Near" is an inaccurate term in this context. Both ranges are beyond the maximum practical distance for day-to-day quality training.

Utah Range (p. 7)

First para, last sentence: "Additionally, the Utah Range instrumentation can track aircraft and monitor aircraft position and flight parameters."

-Air Force Response- Nonconcur. The Utah Range instrumentation, HAMOTS Upgrade System (HUS) does not possess the ability to track aircraft without HUS pods. These HUS pods only work with the range instrumentation at UTTR and are not compatible with any other Air Force or Navy range instrumentation system. The total number of HUS High Activity pods available for

non-Hill AFB users is only nine. There are 13 Low Activity pods available for non-Hill users, but these pods track only heading, altitude, and airspeed. In addition, the HUS tracking system can only track eight of these 22 aircraft. This number is inadequate for composite force training. By contrast, the Nellis Range has 36 pods available. More importantly, debrief capability exists only at Hill AFB. Even if the 366th Composite Wing had pods to use, they would have to land at Hill AFB after every mission to debrief. This would be very impractical for day-to-day training.

Page 8, second para, first sentence: "The North Range is about 175 nautical miles from Mountain Home AFB and consists of almost 350,000 acres of land for exclusive DoD use."

-Air Force Response- Nonconcur. There is no direct routing to the Utah Range from Mountain Home AFB. All departures must fly around Saylor Creek Range, adding 5 to 10 minutes flying time. The North Ranges are approximately 200 NM by normal routing (185 NM direct) from Mountain Home to the Eagle Range target area. (They are even further for the Idaho Air National Guard unit at Boise.) Furthermore, the configuration of the North Range (i.e. long and narrow) makes it unsuitable for anything other than small composite force training. The adjacent Lucin MOA has insufficient vertical altitude for composite force training and is overlain by numerous commercial airways. (There are five airways below 18,000 feet and three above 18,000 feet). Finally, the composite wing must compete with other users for range and airspace use. The fact that the land is available for exclusive DoD use does not solve the other problems of distance, airspace constraints, and competition from existing users.

Page 8, third para, first sentence: "The South Range is 200 nautical miles from Mountain Home AFB and consists of nearly 575,000 acres of DoD-owned land and has areas for conventional and tactical training called Kittyhawk and Wildcat Ranges."

-Air Force Response- Nonconcur. There is no direct routing to the Utah Range from Mountain Home AFB. All departures must fly around Saylor Creek Range, adding 5 to 10 minutes flying time. The South Ranges are approximately 240 NM by normal routing (225 NM direct) from Mountain Home AFB to the center point of the southern range target area. (They are even further for the Idaho Air National Guard unit at Boise.) However, but for its impractical distance, the South Range would be suitable for composite force training.

Page 8, fourth para: "The Utah Range officials initiated two proposals that would increase its capabilities to support tactical training at the North Range. The first proposal was to increase the MOA altitude to 18,000 feet and the second proposal was to establish another target area, the Crater Island Target Complex. Officials at the Utah Range stated that increasing the North Range MOA would provide aircrews with safer low- and medium-level navigation and air combat training. The Crater Island Target Complex proposal would develop a simulated refinery complex, SAM sites, tank columns, gun pits, tunnels, and ground-control-intercept sites. Utah Range officials estimated that the cost to establish the Crater Island Target Complex was about

\$1.0 million. They also stated that its proposals to increase the North Range MOA altitude and to establish the Crater Island Target Complex would allow the North Range to be used exclusively for training, while the South Range would be used for both testing and training. The Crater Island Target Complex was discussed between Air Force Air Combat Command and the Utah Range officials, but Air Combat Command declined to pursue the proposal due to a lack of funds."

-Air Force Response- Nonconcur. The Air Force believes that the "Utah Range officials" cited in the draft report were officers of the 419th Fighter Wing (AFRES). This unit uses the Utah ranges but does not own the ranges nor is responsible for managing or scheduling them. Their suggestion to increase the MOA altitude to 18,000 feet is impractical due to the numerous commercial airways over the MOA. Raising the ceiling was tried once before and stopped by opposition of the Salt Lake City Regional Air Traffic Control Center. In September 1994, the Regional Air Traffic Control Center allowed the airspace to be raised for an exercise; this caused enough problems that they indicated that they would be unwilling to do that again. Their suggestion for another target area is also impractical. Without suitable airspace, a new ground complex would be of little use. Also, development of Crater Island as a target complex has not been studied environmentally. The area surrounding Crater Island is on the salt flats and underwater approximately six months of the year which poses a tremendous bird hazard for low flying aircraft. Further, the cost estimate is not comparable to the ITR estimates. For example, it does not include estimates for five years of operational costs. Finally, these ideas were not discussed with the Air Force Materiel Command (AFMC) range managers, who disagree that the North Range could be used exclusively for training; testing activities would continue.

Fallon Range (p. 9)

Second para, first sentence: "In summary, the Utah, Nellis, and Fallon ranges are suitable for composite force training and the ranges have the required airspace and ground areas."

-Air Force Response- Nonconcur. The Utah North Range, and its adjacent airspace, is not suitable for anything except small composite force training. Because of the distances involved, training at these ranges is either impossible or extremely limited without refueling, and tanker support is not routinely available.

Tactical Training Site Evaluation (pp. 9-10)

First para, third and remaining sentences: "The Air Force also determined that, for the 366th Wing, the training site should be no more than 150 nautical miles from Mountain Home AFB. The Air Force established the 150 nautical miles distance because it is the maximum practical distance that aircrews can travel for routine, day-to-day training without aerial refueling. As a result, the Air Force eliminated the Utah Range from further consideration because it was 175 nautical miles from Mountain Home AFB. However, our review of the 366th Wing flight records for the period of October 1992 through August 1994 indicated that approximately 80 percent of all flights to the

Utah Range were not refueled. Therefore, the Air Force's assertion that flights from Mountain Home AFB to the Utah Range, which was greater than 150 nautical miles, would require refueling was invalid."

-Air Force Response- Nonconcur. It is correct that aircrews can travel to the UTTR North Range unrefueled. However, they obtain extremely limited training when they do so. The Air Force still believes that a training site should be no more 150 NM from Mountain Home AFB because that is the maximum practical distance for routine training. The figure of 150 NM as the maximum practical distance for day-to-day training is based on the unrefueled range of our F-16 aircraft, allowing for approximately 30 minutes of training time at the range. The fact that training sorties were flown to UTTR does not undercut the need for the ITR, but rather reinforces it. Those sorties permitted only 10-15 minutes training time at the range. Assuming a 1.2 hour sortie to the ITR, a Mountain Home AFB F-16 aircrew would devote approximately 75% of flying time to training on the range. A range 150 NM from Mountain Home AFB would decrease the available training time to 43%, while at 200 NM (UTTR) training would be reduced to 21% of the sortie.

Page 10, second para: "The Air Force also eliminated the Utah Range because it believed that testing and training would cause scheduling conflicts. During the audit, we were informed by Utah Range officials that they anticipated a reduction in testing as a result of DoD developing fewer weapons systems. Also, the officials believed that further reductions in testing will result in more available range capacity for training. Officials at neither the Utah Range nor the 366th Wing could provide any documentation that showed training missions were rescheduled or terminated due to being preempted by testing. Consequently, the Air Force improperly eliminated the Utah Range from further consideration."

-Air Force Response- Nonconcur. Although no documentation exists, UTTR and 366th Wing officials have stated that numerous ACC missions have been preempted, canceled, or terminated by AFMC testing. Even if testing were to be reduced, scheduling conflicts would not be eliminated. However, competition for range time at UTTR was not the chief basis for eliminating UTTR as an alternative; distance was the primary drawback. The distance to the UTTR exceeds the maximum practical distance for day-to-day training (150 NM).

ITR Cost Benefit Analysis (pp. 10-11)

First para, first sentence: "The Air Force developed a Cost Benefit Analysis (the Analysis) that identified a \$20.6 million benefit to justify the establishment of the ITR."

-Air Force Response- Nonconcur. The cost benefit analysis was not prepared to "justify" the range but was prepared in response to a specific question on cost benefit from HASC and SASC staffers. Again, the cost benefit analysis attempted to demonstrate that more efficient training at a local range complex was more cost effective than traveling to a remote range to accomplish similar training. That such economy exists is indisputable. The "savings" calculation was not

Department of the Air Force Comments

based on actual or historical sortie data. It attempted to predict a desirable level of training, and then compare the relative costs at alternative locations. The actual savings are flight hours used for training instead of being burned enroute. The justification for the range includes issues beyond just cost, as discussed in previous Air Force responses. The Air Force concurs that the projections used in the cost benefit analysis have not been met and will re-evaluate them.

Second para, fifth sentence: "We examined the Analysis and determined that the Air Force Analysis overstated the flight projections and durations."

Air Force Response- Nonconcur. The Air Force agrees that, to date, the wing has not flown to distant ranges as frequently as projected, but disagrees that the historical numbers will be representative of the wing's future operations. First, the number of aircraft assigned the wing during the period analyzed by the auditors was less than the number of aircraft that had been assumed by the projections. Also, during the period for which the IG examined actual sortie rates at remote ranges, the wing was accomplishing unusual, non-routine training involving long-range, full scale deployments to Volk Field, WI, Egypt (Bright Star 94), and Alaska (Northern Edge 94), as well as major roles in Green Flag 93 and 94. The resources required to perform these major exercises precluded more frequent training sorties to other remote ranges, including fewer missions to UTTR, NAS Fallon, and Nellis. Finally, the composite wing training process continues to be modified and developed. As the composite wing concept matures, deployments would be expected to decrease, and composite force training at DoD ranges would be expected to increase. The Air Force believes that the projections will prove to be more accurate than the historical numbers used by the auditors.

The Air Force also nonconcur that the flight durations were overstated. The flight durations assumed that the flights to the ranges would be refueled. Refueling increases sortie duration and provides higher quality training by allowing aircrews to spend the desired amount of time (30 minutes) on distant ranges. For unrefueled sorties, training time on distant ranges is reduced. It averages less than 20 minutes. This is not efficient training. The Air Force nonconcur with using historical, short average sortie durations at distant ranges as a basis for comparing what would be accomplished at the ITR.

Flight Projections to Remote Ranges (p. 11)

First sentence: "Our examination showed that the flight projections to remote ranges developed by the Air Force were unsupported. The Analysis estimated that 366th Wing will fly 3,481 flights or 25 percent to remote ranges (Appendix A). Using the methodology in the Analysis and the actual number of aircraft assigned, we estimated the number of training flights that the 366th Wing should have flown in FYs 1993 and 1994. We compared our estimated training flights to the 366th Wing's actual flight records. The flight records showed that the 366th Wing flew only 8 percent of our estimate. Therefore, the Air Force proposed to spend \$28.7 million for only 8 percent of training flights."

-Air Force Response- Nonconcur. In essence, the auditors have found that for the past two years the composite wing has flown one third of the sorties to distant ranges that the Air Force projected it to fly. The auditors make the assumption that these conditions will continue. However, historical use rates cannot be translated into future use rates. The Air Force still expects the training sorties to distant ranges to increase in the future if there is no ITR. The question concerns what a reasonable projection would be. The Air Force disagrees with the auditors' assumption that historical experience is the right answer. Also, it is simply incorrect to state that the Air Force will spend \$28.7 million "for only 8 percent of training flights." The funds for the ITR will buy much more in terms of local training than the comparatively limited training developed in the auditors' projections.

Flight Durations (p. 11)

First para: "Estimated flight durations to remote ranges in the Analysis were inaccurate. . . . The flight duration overstatements resulted in an inaccurate flight cost to remote ranges because erroneous average flight duration information was applied to the flight hour cost."

-Air Force Response- Nonconcur. The average flight duration information was not "erroneous" but was an assumption concerning the flight duration required to obtain adequate training time at the distant ranges. The Air Force does not agree with the auditors' own methodological assumption, which is to use historical sortie rates and historical flight durations. Both the rates and the durations are below what the Air Force ultimately expects and hopes to accomplish. Certainly some missions have been flown to remote ranges without air refueling, but they accomplished only 10-20 minutes of training on the range. The relatively small number of sorties and the brief amount of training that can be accomplished unrefueled is less than what the Air Force desires, and it is markedly less than what would be accomplished were there an Idaho Training Range.

Second para: "We recalculated the Air Force Analysis and determined that no cost benefit would be derived from the establishment of the ITR. Based on the 366th Wing flight records to remote ranges in FY 1994 and our revised flight durations, we projected that the 366th Wing would spend \$5.6 million annually flying to the remote ranges (Appendix C). The Analysis projected with the ITR, the 366th Wing would spend \$6.4 million annually flying to remote ranges. Therefore, the Air Force cannot support the projected \$20.6 million cost benefit as shown in the Analysis. In addition, the establishment of the ITR cannot offset the projected annual operation and maintenance of \$2.0 million and \$26.7 million of initial investment."

-Air Force Response- Nonconcur. The auditors have made fundamental errors in their analysis. They have calculated a so-called "historical" flight cost without the ITR by multiplying hourly cost times historical flight durations times an auditor-estimated number of future flights to each range. They have then compared the result to a projected flight cost with the ITR by multiplying the Air Force's projected hours at distant ranges times the Air Force's projected average sortie duration times hourly flight costs. This comparison indicates that the Air Force would spend less

time flying to distant ranges were the ITR never built than it would spend flying to distant ranges if an ITR were built. This is seriously wrong. It compares what it would cost to fly an auditor-projected number of historically short duration missions without an ITR to what it would cost to fly the Air Force's projected number of longer duration missions with the ITR. This compares apples and oranges and is completely invalid as a basis for concluding that the ITR would have "no cost benefit."

Training Requirements (pp. 11-12)

Fifth and remaining sentences: "We determined that the 366th Wing will be required to conduct approximately 11,555 flights in FY 1995 to meet Air Force Air Combat Command (ACC) training requirements for a "combat ready" status (Appendix D). We compared the required training flights to the flights projected in the Air Force and identified an overstatement of 2,665 flights (19 percent) (14,220 less 11,555). Consequently, the Analysis overstated the required number of training flights a pilot needs to be in a "combat ready" status."

-Air Force Response- Nonconcur. The Air Force disagrees with the logic that minimum pilot training requirements alone determine training flights. The flying hour program (FHP) determines the number of training flights. The FHP consists of utilization rates times average sortie duration and is based on many factors, such as inflight maintenance, weather, adversary scheduling, and air traffic control problems. In fact, training events are scheduled according to available sorties. For a given sortie, more training events can be accomplished at a local range than at a distant range, due to flying time consumed in transit.

Training Range Study (p. 12)

First para, fifth and sixth sentences: "The contractor also stated that although the ITR was not needed for the 366th Wing training, the ITR would enhance the quality of training. However, no qualifications were made to the degree that training would be enhanced."

-Air Force Response- Nonconcur. The contractor supports the ITR proposal and made the following statement in the study: "When completed...the ITR will provide some of the best training in the U.S. outside of Nellis, and will appreciably enhance the combat effectiveness of this important unit." (ACC Range Study, p. vii).

First para, seventh and eighth sentences: "During our discussions with ACC officials, they stated that ACC did not agree with the contractor study conclusions on the need for the ITR; however, the ACC officials could not document the basis of their disagreement."

-Air Force Response- Nonconcur. The ACC officials did not disagree with the contractor study conclusions on the need for the ITR.

Training Quality (pp. 13-14)

Second para, first sentence: "Our review showed that the capabilities of the Utah Range satisfy the training quality attributes applicable to 366th Wing training."

-Air Force Response- Nonconcur. The Air Force agrees that the southern portion of the UTTR is satisfactory for composite force training. However, the Air Force disagrees that it is satisfactory for the composite wing because it is located effectively 240 NM away. The North Range is unsuitable for anything other than small composite force training.

Second para, last sentence: "Additionally, the North Range's training quality attributes would be further enhanced if the Crater Island Target Complex, at an estimated \$1.0 million, were established."

-Air Force Response- Nonconcur. For reasons previously stated, the hypothetical Crater Island Target Complex is impractical and the \$1.0 million cost estimate is significantly understated.

Third para: "Air Force ACC officials acknowledged that establishing the Crater Island Target Complex, in conjunction with other capabilities of the Utah Range's North Range, was a viable alternative to establishing the ITR. Air Force ACC officials stated that the Utah Range's potential to satisfy 366th Wing training deserved further evaluation."

-Air Force Response- Nonconcur. No one dealing in any official capacity with the ITR program made this statement. ACC fully supports establishing the ITR and does not believe Crater Island is a viable alternative.

Conclusion (p. 14)

First sentence: "The issues in this report clearly show that establishing the ITR would create an unwarranted duplication."

-Air Force Response- Nonconcur. See previous responses.

Fourth sentence: "DoD budget draw-downs do not permit the expenditure of resources to satisfy a need that existing available resources can meet."

-Air Force Response- Nonconcur. See previous responses. Existing available resources do not meet the Air Force's desire to enhance the quality of the composite wing's training.

Fifth and remaining sentences: "The Air Force should cancel its proposed action to establish the ITR because it would be an unwarranted duplication of existing DoD training ranges and has no cost benefit. The Air Force and Idaho National Guard should use existing DoD training ranges to meet their composite force training needs and avoid the unnecessary expenditure of approximately \$35.4 million from FYs 1994 through 1999. If the Crater Island Target Complex was established, the \$35.4 million would be reduced by an estimated \$1.0 million associated with the new complex."

-Air Force Response- Nonconcur. See previous responses.

Recommendations for Corrective Action (p. 15)

Second paragraph: "We recommend that the Air Force Deputy Chief of Staff, Plans and Operations, cancel the effort to establish the Idaho Training Range and continue the use of existing training facilities."

-Air Force Response- Nonconcur. The ITR has the strong support of Air Force and DoD senior leaders, including the Chairman of the Joint Chiefs of Staff. The draft audit report does not change the basis for the Air Force's position.

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INTERNET DOCUMENT INFORMATION FORM

A . Report Title: Idaho Training Range Justification

B. DATE Report Downloaded From the Internet: 01/07/99

C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #): OAIG-AUD (ATTN: AFTS Audit Suggestions)
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D. Currently Applicable Classification Level: Unclassified

E. Distribution Statement A: Approved for Public Release

F. The foregoing information was compiled and provided by:
DTIC-OCA, Initials: __VM__ **Preparation Date** 01/07/99

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